

## REMARKS/ARGUMENTS

The rejections presented in the Office Action dated February 2, 2009 (hereinafter Office Action) have been considered. Claims 1, 2, 4-14 and 17-22, and 24-34 remain pending in the application. Reconsideration of the pending claims and allowance of the application in view of the present response is respectfully requested.

**1. Claims 1-3, 14-20, 22, 23, 25-29 and 31 are rejected based on 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 7,212,543 to Arwald *et al.* (hereinafter “Arwald”) in view of U.S. Publication No. 2004/0267876 by Kakivaya *et al.* (hereinafter “Kakivaya”).**

The Applicants respectfully submit that the claims as previously presented are not rendered obvious in view of the combination of Arwald and Kakivaya. However, in order to facilitate prosecution of the application and in a *bona fide* attempt to advance the application to allowance, the Applicants present this response with amendment to clarify particular aspects of the claimed invention. These amendments make more clear what is believed to have been originally set forth in these claims, but now states so more specifically.

Independent Claims 1, 14, 17, 19, 22, 25, 28 are first considered. Claim 1 has been amended to indicate that a service request is received from a service requestor via a home proximity network. The service request is translated from a first service ad hoc discovery protocol to a second ad hoc service discovery protocol by way of a generic service discovery format. Claims 14, 17, 19, 22, and 25 have been amended to include analogous features relating to a home proximity network and generic service discovery formats. These amendments are fully supported in the Specification (e.g., p. 11, lines 7-17 and p. 19, lines 23-31) and no new matter has been added.

In the Office Action, Arwald was relied upon to show translating between service discovery protocols. For example, in the rejection of Claim 1, Arwald at col. 10, lines 1-65, col. 12, lines 11-67, and column 13, lines 1-15 were cited as showing translation of a protocol of a service discovery request into a service discovery protocol used by an Internet-located service registry, the translated service discovery request being used to discover an

Internet service provider of the service requested. However, the discussion at column 10 of Arwald only describes a protocol coordination mechanism that “keeps track of the different protocols employed by the different object...[compares] the communication attributes between the different protocols...[to]determine the most effective protocol to which to direct the different adapters used by the objects for making the communication link... [and considering] whether special requirements are needed when translating between the different protocols.” (Arwald, col. 10, lines 1-17). However, neither here nor elsewhere in the reference are these “protocols” described as service discovery protocols.

Arwald describes the networks to in which the protocol coordination mechanism operates as “designated for specific use such as telephony, data communication, power transmission and distribution, video and audio programming distribution such as wired cable TV, wireless-cable, wireless local nets, cellular communication networks and the like.” (Arwald, col. 3, lines 48-52). Further, Arwald states that “[t]hese different networks all have different protocols and thus to each of these networks is included an adapter” and a “centrally arranged control equipment sets up communications between the objects (A G) and/or use of services or between objects.” (Arwald, col. 3, lines 52-61).

Arwald merely suggests protocol translation between generalized communications protocols, and fails to teach or suggest any use of “service discovery protocols,” as such term is known and used in the art. In paragraph 6 of the Office Action, the Examiner further cites the following from column 10 as teaching translating between service discovery protocols: “the protocol coordination mechanism 45 will identify the protocols that are within the vocabulary of the different objects under consideration, so that the resulting protocols employed during the communication session, places the minimum translation burden on the router 39.” However, as Applicants continue to assert, this does not include service discovery protocols because Arwald is silent on any service discovery protocols. The Examiner further states in this paragraph that “One example of an object can be a service registry.” However, Arwald does not teach or suggest a service registry, therefore there can be no reliance on Arwald to teach a service discovery protocol used by an Internet-located service registry.

Applicants submit that Arwald does not teach or suggest any manner of service discovery. Part of the cited excerpts from Arwald states “protocol coordination mechanism 45, monitors the respective subscriber profile stored in the database 37, for the purpose of establishing which services are available and usable for that particular called subscriber during the communication and also for determining whether or not any of the services to which the parties have access may create conflicts.” (Arwald, col. 12, lines 37-57). Here, Arwald is clearly describing services to which the calling parties have already subscribed/have access to, and is not describing any discovery of new services. Further, even if this were being relied upon to show service discovery, there is clearly no translation between service discovery protocols being described here.

Applicants further note that Arwald is describing a centralized controller in an inter-network architecture, and is unrelated to the type of service discovery and translation that would occur in a home proximity network. In contrast, Claims 22 and 25 for example, are directed to a system and method where mobile devices and home devices communicate on the same home proximity network. In the other independent claims, service discovery occurs via a home proximity network. In such a network, user devices such as mobile terminals implement the service discovery protocols and may directly interact with other home devices on the same home network for service discovery. In such a case, “mobile terminals 108 and 102 require fast and precise results that utilize simple search logic.” (Specification, p. 9, lines 19-21). However, Arwald merely describes translation of communication protocols between separate networks, and does not teach or suggest a home proximity network with user devices that utilize service discovery on the network.

Finally, Applicants note the language added to the amended independent claims that is directed to the use of a generic service discovery format, such as discussed on page 11, lines 7-17 of the instant Specification. Arwald merely describes a “translation operation when communication between two objects uses an incompatible protocol such that a translation operation is performed in the router 39,” (Arwald, col. 13, lines 45-48), and does not provide specifics of how any translation occurs. Nor would such detail be relevant to

the present claims, because Arwald does not teach or suggest the use of service discovery or of translating between service discovery protocols.

The Kakivaya reference was not relied upon to cure these deficiencies of Arwald as discussed above. Kakivaya describes improvements to an ad-hoc discovery protocol such as Universal Plug and Play (UPnP). Kakivaya does not teach or suggest any translation of service discovery, nor does Kakivaya teach or suggest details of any inter-network operations such as described in Arwald. Accordingly, Applicants assert that the Arwald/Kakivaya combination fails to render independent Claims 1, 14, 17, 19, 22, 25, and 28 obvious.

Dependent Claims 3, 15, and 23 have been cancelled without prejudice or disclaimer, and so the rejections of these claims are now moot. Dependent Claims 2, 16, 18, 26, 27, 29, and 31 depend respectively from independent Claims 1, 14, 17, 22, 25, and 28 and were also rejected as obvious in view of the Arwald/Kakivaya combination. Without acquiescing to any particular rejections to these dependent claims, including any assertions concerning inherency or the taking of Official Notice, it is believed that these rejections are now moot in view of the remarks made in connection with independent Claims 1, 14, 17, 22, 25, and 28. "If an independent claim is nonobvious under 35 U.S.C. §103, then any claim depending therefrom is nonobvious." M.P.E.P. §2143.03; citing *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

**2. Claims 4-8 and 30 are rejected based on 35 U.S.C. §103(a) as being unpatentable over *Arwald* in view of *Kakivaya* as applied to claim 1, and further in view of U.S. Patent No. 6,741,695 to *McConnell et al.* Claims 9-13 are rejected based on 35 U.S.C. §103(a) as being unpatentable over *Arwald* in view of *Kakivaya* and *McConnell et al.* as applied to claim 8, and further in view of U.S. Patent No. 6,130,917 to *Monroe*. Claim 21 is rejected based on 35 U.S.C. §103(a) as being unpatentable over *Arwald* in view of *Kakivaya* as applied to claim 1, and further in view of U.S. Publication No. 2004/0208164 by *Keenan et al.* Claim 24 is rejected based on 35 U.S.C. §103(a) as being unpatentable over *Arwald* in view of *Kakivaya* as applied to claim 1, and further in view of U.S. Publication No. 2006/0178137 by *Loveland*.**

Applicants respectfully traverse the rejections, but submit that the rejections are now moot in view of the amendments and remarks concerning independent Claims 1, 17, 22, and 28 from which Claims 4-13, 21, 24, and 30 respectively depend. None of McConnell et al., Monroe, Keenan et al., or Loveland were relied upon to cure the deficiencies of the Arwald/Kakivaya combination as applied to Claims 1, 17, 22, and 28, nor do these additional references provide such a cure. Accordingly, Claims 4-13, 21, 24, and 30 are also in condition for allowance.

### **3. Conclusion**

Applicants respectfully submit that the amendments and arguments presented herein place pending Claims 1, 2, 4-14 and 17-22, and 24-31 in condition for allowance. Applicants also note newly added Claims 32-34. These new claims are fully supported in the Specification as filed (e.g., p. 11, lines 7-17) and no new matter has been added. Claims 32-34 are allowable over the cited combinations of references at least because of their respective dependence from Claims 1, 19, and 28. Entry and allowance of Claims 32-34 is therefore respectfully requested.

Authorization is given to charge Deposit Account No. 50-3581 (NOKM.094PA) any necessary fees for this filing. If the Examiner believes it necessary or helpful, the undersigned attorney of record invites the Examiner to contact the undersigned attorney to discuss any issues related to this case.

Respectfully submitted,  
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